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STAINLESS

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ATLAS-WHITE

PORTLAND CEMENT



THE ATLAS PORTLAND CEMENT CO.
30 BROAD STREET, NEW YORK CITY



STAINLESS ATLAS-WHITE PORTLAND CEMENT



HE growing demand for a Portland Cement that is pure white in color, thereby lending itself to decorative features in concrete that cannot be



attained by the commercial portland cements, together with the discovery within the radius of

their large plants at Northampton, Pa., of the necessary materials, (Calcite and Clay of the very purest qualities) are the prime considerations that have prompted THE ATLAS PORTLAND CEMENT COMPANY to produce and place on the market Stainless ATLAS-WHITE Portland Cement. In introducing this cement to the public we wish to emphasize the fact that our product absolutely justifies its name, is pure white in color and non-staining, and the reputation attained in the manufacture of Atlas Portland Cement is sufficient guarantee of our ability to produce in quality and uniformity a White Portland Cement as popular and reliable as our other product.

The manufacture of Portland Cement is strictly a chemical proposition, and the manufacturers of Portland Cement are nothing more or less than manufacturing chemists exercising the same care in the selection and proportioning of their material as the manufacturing chemist who stamps his product "Chemically Pure." So, also, can the Portland Cement Manufacturer use the phrase "Quality and uniformity guaranteed" with the same feeling of pride and satisfaction. Therefore, as stated, this Company is manufacturing and offers for sale a product that is dependable in every way and superior in quality to any other White Portland Cement manufactured.

Our Calcite and Clay are specially selected and contain the ingredients, Lime, Silica and Alumina in proper proportions and are practically

free from Iron Oxide, which latter constituent is the cause of the dark color in the grey Portland Cement.

We wish to emphasize the fact that Stainless ATLAS-WHITE Portland Cement is a true Portland, its chemical composition being practically identical with that of our Atlas Portland Cement, its strength both in tension and compression the same, and we unreservedly claim that it will meet the requirements of the Standard Specifications for Portland Cement. It is manufactured with the utmost care at our Northampton plants under the efficient supervision of our Staff of Expert Chemists, and, although only on the market since January 1, 1910, it has commanded the wide attention it justly merits.

Since January 1, these chemists have daily tested this material, and our laboratory records prove that all the claims we make for the quality of this material can be sustained. We call attention to the records of outside laboratories printed herewith.



Tests made for the Department of Bridges, City of New York

Analysis and Physical Test

CHEMICAL AND PHYSICAL LABORATORIES

Analysis, Mechanical Testing Technical Experimentation and Systematic Inspection of Materials.

Investigation of Processes and Economies

Consulting and General Practice in Chemical Engineering

Expert Service in Legal Cases

Dr. Chas. F. McKenna

OFFICES

HUDSON TERMINAL, 50 CHURCH STREET

Certificate of Analysis

New York October 19th, 1910.

Laboratory No. 9501

Department of Bridges, City of New York
21 Park Row

New York City

I have examined the sample of White Portland Cement - - - - received from your Mr. E. D. Knap - - - - - with mark as shown below, and I find the following to be the result.

Mark:

"370½ add S 10/11/10 Recd."

Silica				 23.62%
Alumina				7.38%
Oxide of I	ron			0.32%
Lime,				61.32%
Magnesia				1.32%
Sulphuric Anhydride				2.05%
Loss on ignition,				3.87%
				99.88%

Respectfully,

CHAS. F. McKENNA

Standard Specification Requirements of the AMERICAN SOCIETY FOR TESTING MATERIALS indicated in red

ROBERT A. CUMMINGS,, M. Am. Soc C E., President and Treasurer

ERNEST B. McCREADY, M. S General Manager

LEHIGH VALLEY TESTING LABORATORY

"In the Heart of the Lehigh Valley Cement District"

STANDARD TESTING-INSPECTION AT MILLS

ALLENTOWN, PA.

General Offices 4 Smithfield St., Pittsburg, Pa Bell Telephone, 3189 Court

Office and Laboratories
Fourth and Linden Sts., Allentown, Pa.
Loca! and Long Distance Telephones

Report on Cement Sampled and Tested for The Atlas Portland Cement Co., Northampton, Pa. Order No. 526.

Brand "Atlas Stainless White Portland"	Sampled at
Manufactured by Atlas Portland Cement Co.	
No. of Barrels	
Car Number,	
Shipped	Tests Made 11-23-10.

TENSILE STRENGTH OF BRIQUETTES (Pounds per Sq. In.).

Bri- quettes		NE	AT	STANDARD SAND, 3 TO 1			
	24 hours	7 days	28 days 3 mos.	7 days	28 days	3 mos.	
(Mini-	130 ca 100	150 to 500	150 to 650	150 to 200	200 to		
1 . 2 . 3 . 4 . 5	364 365 342 362 339	610 621 600 634 630		347 304 321 320 317			
Average	354	619		322			

Constancy of Volume—Pats Firm and Hard. Initial Set not less than 30 Minutes
Final Set not more than 10 Hrs.

Soundness—Air Pat firm and hard.

Cold Water Pat firm and hard.

Hot Water Pat firm and hard.

Setting Time-Initial Set 1 hr. 55 min. Final Set 4 hrs. Per Cent. Gauge Water-Neat 25.0%

Fineness—No. 50 Sieve 100.0% No. 100 Sieve 98.6% (not less than 92.0 per cent.) No. 200 Sieve 90.6% (not less than 75.0 per cent.)

 $\begin{array}{c} \text{Sand 10.2\%} \\ \text{Temperature-Laboratory Air 72 F.} \end{array}$

Gauge Water 70 F.

Specific Gravity as rec'd 3.06 (not less than 3.10) ignited 3.09 Per Cent. Humidity......50%

CHEMICAL ANALYSIS

Remarks:

Date, Wednesday, Nov. 30, 1910. Signed, Lehigh Valley Testing Laboratory.

"The minimum requirements for the 24 hour neat cement test should be some value within the limits of 150 and 200 pounds, and so on for each period stated."—STANDARD SPECIFICATIONS.

ERNEST B. McCREADY

NEW YORK

ST. LOUIS

SAN FRANCISCO 90 West St. Syndicate Trust 425 Washington St. Bldg.

LONDON, ENG. MONTREAL Norfolk House, Canadian Express Monongahela Cannon St., E. C. Bldg. Bank Bldg.

ROBERT W. HUNT & CO.

Bureau of Inspection, Tests and Consultation

General Office: 1121 "THE ROOKERY." CHICAGO, ILL.

F 7722

New York

Nov. 23,

1910

Report of tests on Sample of "Atlas" White Portland Cement Submitted by Atlas Portland Cement Co.

Initial Set 2 Hrs. 00 Min.

Cold Water Test.

Final Set 6 Hrs. 10 Min.

Boiling Test O. K

Per cent. fineness on 100 Sieve, 98 200

		TENSILE TEST						
INITIAL SET		NEAT			1 CEMENT		3 SAND	
Number	Hr. Min.	24 Hr.	7 day	28 day	24 Hr.	7 day	28 day	
		270 290 280 300 320	580 630 605 615 590			275 310 300 285 320		
Average								

Sample received 11-16-10. For Atlas Portland Cement Co Remarks:

ROBERT W. HUNT & CO

White, or Stainless Cement has been on the market to a limited extent for a number of years, having been used mostly for interior decorative work, but the value of the material for exterior stucco work and many other purposes has wonderfully increased the scope of its usefulness.



For Decorative Purposes

It is being used today for

Interior and Exterior Decorative Work,

Exterior Stucco.

In Mortar for setting Marble, Tile, Brick and Stone,

Facing Concrete Block,

Decorative Concrete Stone, and Statuary,

Terrazzo Floors,

Artistic Color Effects in conjunction with various colored pigments.

Wainscoting for bathroom and kitchen walls.

The color of the finished surface is largely that of the cement used, but the color of the sand has a most important influence. The difficulty of obtaining in some localities a sand of a satisfactory quality has influenced THE ATLAS PORTLAND CEMENT COMPANY to place upon the market for the convenience of its customers the following mixtures:

Atlas White Mixture No. 1

This consists of equal parts of Stainless ATLAS-WHITE Portland Cement and pure white silica sand, pulverized together. It is slow setting and easily worked under the trowel and may be used where a strong, rich mixture is desired. The pulverizing of these materials together eliminates the danger of crazing, and offers a very desirable material for many uses, particularly interior work, where a smooth finish is desired.

Atlas White Mixture No. 2

This consists of one part of No. 1 Mixture to which has been added an amount of sand equal to the amount of sand pulverized with the Stainless ATLAS-WHITE Portland Cement, so that here we really have one part of Stainless ATLAS-WHITE Portland Cement mixed with two parts of sand, one half of the sand being pulverized with the cement. This mixture shows great strength and is desirable where a rich sand mixture for stucco work is required.

Atlas White Mixture No. 3

This consists of one part of Mixture No. 1, to which has been added an amount of sand equal to twice the amount of sand pulverized with the Stainless ATLAS-WHITE Portland Cement, so that here we really have one part of Stainless ATLAS-WHITE Portland Cement, mixed with three parts of sand, one third of the sand being pulverized with the cement. This mixture may be used where a leaner mixture is desirable. It has greater strength than the same proportions of sand and cement mixed in the ordinary way.

For Decorative

Purposes

The desirability of these various mixtures will be at once apparent. The architect or contractor will have at his command a material prepared ready for use, the pro-

portions of which are guaranteed, thus eliminating all chances of improper materials being mixed with Stainless ATLAS-WHITE Portland Cement, and by means of these mixtures is assured of a reliable white surface.



Purposes

Prices of these various mixtures are such as will permit the contractor to use them with greater economy than would be possible were it necessary to search in the open market for the proper ingredients.

We are placing this information before the trade so that they may feel no hesitancy in recommending and specifying the use of these various mixtures. All these mixtures are made by weight and packed in the standard barrel used in packing Atlas Portland Cement.

We advise against the use of neat White Portland Cement, as when so used it will show the slight crazing cracks which are universal when Portland Cement is used in this way. For finishing purposes we advise the use of Mixture No. 1, and for the same reason we recommend this same mixture with the addition of ten per cent of Hydrated Lime for use to replace Cold Water Paint for whitewashing interior surfaces or brick or stone, or interior courts of apartment houses.

The use of Stainless ATLAS-WHITE Portland Cement in Stucco is so desirable that complete directions for the proper handling of the materials and its application are given as follows:

Specifications for White Portland Cement Stucco

Stucco may be used to cover wood, brick, stone or other building material, provided special precautions are taken in preparing the surface properly so that it will adhere and not crack or scale off. As a rule two coats are Atlas Portland Cement, 12 parts clean, coarse sand and three parts slaked lime putty and a small quantity of hair.

The second, a finishing coat, composed of one part Atlas-White Portland Cement and three parts clean, coarse, quartz sand. (Mixture No. 3.) Should only one coat be desired, the second or finishing coat of Atlas-White is used.



For Decorative

To apply stucco to brick, or stone, or concrete, clean the surface of the wall thoroughly, using plenty of clean water so as to soak the wall. If the surface is concrete, roughen it by picking with a stone axe. Plaster with a 1½-inch coat and finish the surface with a wood float, or to make a rough surface cover the float with burlap. Protect the stucco work from the sun and keep it thoroughly wet for three or four days; the longer it is kept wet the better.

In using stucco on a frame structure, first cover surface with two thicknesses of roofing paper. Next put on furring strips about one foot



apart, and on these fasten wire lathing. (There are several kinds of lathing, any of which are good.) Apply the scratch coat ½-inch thick and press it partly through the openings in the lath, and roughen the surface with a stick or trowel. Allow this to set well and apply the finishing coat ½ inch to one inch thick. This coat can be put on and smoothed with a wooden float, or it can be thrown on with a trowel or large stiff-fibered brush, if a spatter-dash finish is desired. A white pebble-dash finish may be obtained with a final coat of one part Atlas-White Portland Cement, three parts coarse, quartz sand and quartz chips not over ¼ inch in diameter, thrown on with a trowel.





FOR DECORATIVE WORK